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# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

M0030079  
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February 24, 2009

Randy Marriott  
Marriott Rock Products, LLC.  
5238 West 2150 North  
Ogden, Utah 84404

Subject: Second Review of Notice of Intention to Commence Large Mining Operations, Marriott Rock Products, LLC., Rocky Point Gravel Mine, M/003/0079, Box Elder County, Utah

Dear Mr. Marriott:

The Division has completed a review of your Notice of Intention to Commence Large Mining Operations for the Rocky Point Gravel Mine, located in Box Elder County, Utah. The attached comments will need to be addressed before tentative approval may be granted.

The comments are listed under the applicable Minerals Rule heading; please format your response in a similar fashion. Please address only those items requested in the attached technical review by sending replacement pages of the original mining notice using **redline and strikeout** text, so we can see what changes have been made. After the notice is determined technically complete and we are prepared to issue final approval, we will ask that you send us two clean copies of the complete and corrected plan. Upon final approval of the permit, we will return one copy stamped "approved" for your records.

The Division will suspend further review of the Notice of Intention until your response to this letter is received. If you have any questions in this regard please contact me at 801-538-5261 or, Lynn Kunzler 801-538-5310. Specific review comments (see initials) may be directed to the technical staff - Tom Munson at 801-538-5321 or Leslie Heppler at 801-538-5257. Thank you for your cooperation in completing this permitting action.

Sincerely,

Paul B. Baker  
Minerals Program Manager

PBB:lk:vs  
Attachment: Review  
P:\GROUPS\MINERALS\WP\M003-BoxElder\M0030079-RockyPointGravel\final\REV2-2086-02112009.doc



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## SECOND REVIEW OF NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS

**Marriott Rock Products, LLC**  
**Rocky Point Gravel Mine**  
M/003/0079  
February 24, 2009

### General Formatting of NOI

Please provide a complete 'Table of Contents' that identifies the materials under each tabbed section and locations of maps, cross sections, and exhibits. Please make sure referenced materials (maps, cross sections, etc.) are labeled as they are referred to in the text.

### R647-4-105 - Maps, Drawings & Photographs

#### General Map Comments

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
1	All	Please label all cross sections with maximum slope angles. The way the cross sections are labeled, it is difficult to tell the slope angles	LAH	

#### Specific Map Comments

##### **105.1 Topographic base map, boundaries, pre-act disturbance**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
2	Base map	The label "Reclamation Area" is not clear. Is this an area to be reclaimed or an area that has been reclaimed? Please re-label as appropriate.	LAH	

##### **105.2 Surface facilities map**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
3	Surface Facilities Map	Identify where fuels, lubricants, etc. are stored. If these materials are not stored on site, please indicate this in the text.	LAH	
4	Surface Facilities Map	A map of the facilities area needs to be provided of appropriate scale to verify units for reclamation cost calculations.	LAH	

##### **105.3 Drawings or Cross Sections (slopes, roads, pads, etc.)**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
5	Geology Map	The key for the geologic map is incomplete. Please include the descriptions of each unit.	LAH	
6	Geology Map/ page 13	A landslide is noted in the text but is not shown on the map.	LAH	
7	Geologic cross section	Cross section is difficult to read. Please fix the problem with the font and include all units shown in the key for the geologic map and cross section".	LAH	
8	Watershed Map	More detail is needed. Please change the scale to show more detail around the site. Please note: As shown, water flow arrows cross a drainage, and the written text says the drainage will not be disturbed. Drainage basins need to be defined.	LAH	
9	Full X-Section	Keep the vertical exaggeration consistent with the other cross sections (no vertical exaggeration).	LAH	
10	Reclamation Treatments Map	It is difficult to read and understand this map. The Division suggests adding a phase 1 and a phase 2 with a scale that will allow for more detail.	LAH	

## **R647-4-106 - Operation Plan**

### **106.2 Type of operations conducted, mining method, processing etc.**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
11	Page 10	If only Phase 1 is to be bonded for, please include a bond map that clearly shows areas that will be bonded and disturbed during Phase 1. While the Proposed Mining Phases Map shows the phases, it needs to be clear on this map that mining will only occur in the Phase 1 area at this time.	LAH	
12	Page 10	Emulsion is generally used for blasting in wet conditions. If this is the case, more detail is needed on the hydrology of the area.	LAH	
13	Omission	Please include a discussion of potential effects of the mining operation on the canal and natural gas pipeline. Please also show how effects will be monitored. The Division suggests installing at least one open standpipe piezometer near the canal for the purpose of checking groundwater levels. There should also be a plan for monitoring stability of portions of the highwall near the canal, and an emergency action plan should be developed in case the canal fails.	PBB	

### **106.3 Estimated acreages disturbed, reclaimed, annually**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
14	Page 11	More detail is needed in the estimate table - Add the estimate of the approximate years in which the phases will occur, such as "Phase One 1-3 years...., Phase Two 2-5 years....Phase Three 5-10 years."	LAH	

### **106.6 Plan for protecting & redepositing soils**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
15	Page 11	On this page, please reference the Map (Reclamation Treatments Map) that shows the location of plant growth material stockpiles.	LAH	

### **106.8 Depth to groundwater, extent of overburden, geology**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
16	Page 13 & 14	Geologic Units discussed in text should discuss the geomechanical properties of the formation in relationship slope stability of the mine.	LAH	
17	Page 13 & 14	The Division recommends that a geologist review the written text for technical corrections that are needed. More emphasis is needed as it is related to the Rocky Point Mine.	LAH	

## **R647-4-109 - Impact Assessment**

### **109.1 Impacts to surface & groundwater systems**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
18	Figure 2-2	This figure shows a typical sediment basin. The design on the outlet pipe should be modified to incorporate an 90 degree elbow on the inlet pipe with a trash rack to prevent plugging with sediment and debris.	TM	

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
19	Figure 2-3	The ditch inlet into the sediment basin does not make sense due to the 90 degree turn it makes just prior to the pond. This 90-degree turn could cause failure during a storm event, even though there is an emergency overflow. The inlet should be redesigned to avoid the sharp angle just prior to the inlet.	TM	

#### 109.4 Slope stability, erosion control, air quality, safety

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
20	Page 18	How will the Questar gas line and the valve house be protected from blasting and blasting vibration?	LAH	
21	Omission	It is not clear if any of the slope angles are greater than 1H:1V during mining. Cross sections indicate a final highwall of less than 1H:1V for final grade. Please address slope angle during mining and post mining in written text.	LAH	

#### R647-4-110 - Reclamation Plan

#### 110.2 Roads, highwalls, slopes, drainages, pits, etc., reclaimed

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
22	Page 19	The wording in the first paragraph is confusing. As written, "1:1 (or 45 degrees)" is incorrect. Please rewrite to leave out the "or". The correct wording might be "to a 1H:1V (45 degrees) steepness . . .". Also in the first paragraph, please describe what is meant by "undisturbed consolidated material."	LAH	
23	Pg. 21	The impoundment to be left will have to be approved as part of the post mining land use. It still is unclear what will happen to the sediment structures at the time of reclamation. Please provide a statement in this section stating the disposition of any impoundments at the time of reclamation.	TM	
24	Page 21	As written "Highwalls (1:1 slopes) will be planted as possible..." More detail is needed, as 1:1 slopes are difficult to plant. Text continues to "Otherwise 1:1 slopes will be left for vegetation to recolonize..." Statements are conflicting and permit needs more detail.	LAH	

#### R647-4-113 - Surety

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
25	Page 7	Most of the equipment listed is mobile. Some of the equipment listed is semi-mobile and needs to be included in the surety calculation. (office, scales etc.).	LAH	
26	Appendix E	Due to lack of commitment in reclamation plan. The surety estimate is difficult evaluate.	LAH	
27	General	The Division is attempting to standardize reclamation surety calculation techniques and requests that surety calculations are made in a format available from the Division. Please contact Wayne Western at 01-538-5263 or by e-mail at waynewestern@utah.gov for further information.	WHW	